National Association of State Boating Law Administrators

Engineering, Reporting & Analysis Committee (ERAC)

Final Committee Report
2016 Cycle

August 25, 2016

2016 Engineering, Reporting & Analysis Committee (ERAC)

CHARTER IN SUPPORT OF NASBLA'S MISSION AND SERVICE TO THE MEMBERSHIP:

As one of NASBLA's four standing policy committees in 2016, ERAC identifies, evaluates, and analyzes recreational boating data and other related information that can shed light on factors associated with boating accidents; be used to inform the development of state- and national-level boating safety policies, programs and campaigns; and, ultimately, be used to measure their effectiveness.

To ensure that the results of boating accident research and analyses are valid and reliable, ERAC also actively seeks ways to advance the quality, relevance, accuracy, consistency, applicability, and completeness of the data and information.

IN PRACTICE, ERAC:

- Takes on targeted research questions. ERAC teams analyze accident report data and other boating-related statistics to identify risk factors, patterns and trends in boating accidents;

- Works in partnership with the States, the U.S. Coast Guard, and other key agencies and organizations in the recreational boating community to improve the criteria, processes, and training associated with reporting, collecting, entering and using accident data;

- On behalf of the States, and in the interest of uniformity and shared understanding, collaborates with the U.S. Coast Guard to clarify accident reporting criteria and procedures;

- Identifies and examines boating safety programs, equipment design, and related efforts that could mitigate risk factors identified through the committee's analyses;

- Monitors the activities of and receives reports from subcommittees and panels of NBSAC, ABYC, NMMA, and UL, among others, to identify and inform about issues of mutual interest; and

- Also interacts with other NASBLA committees and panels and stays informed about projects of mutual interest—not only to add value to ERAC products, but also to determine how ERAC can effectively serve as a resource to them.

In early CY 2016, ERAC transitioned its leadership,[1] and at the request of NASBLA's Executive Board, as part of the restructuring, organized its work around four subcommittees—Administrative, Accident Reporting & Analysis, Special Projects, and Engineering & Equipment Issues. Members developed products and engaged in significant monitoring and resource activities in smaller teams within these areas. The bulk of committee work was done online and via teleconference. However, ERAC also had an all-day meeting Fri., Feb. 19, 2016, in Lexington, Ky. See **APPENDIX: ERAC-2016-Overall** for subcommittee and charge team lists, the **February meeting summary**, and the committee calendar.

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[1] Tammy Terry, ERAC Chair since May 2010, moved to a different division in the Ohio Dept. of Natural Resources and resigned her leadership role effective Jan. 11, 2016. Vice Chair Glenn Moates, TN, was appointed chair, and at-large member Kris Wahlers, CO, was appointed vice chair.

2015-2016 COMMITTEE ROSTER (see also APPENDIX ERAC-2016-Overall)

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**As of March 1, 2016, an individual (associate) member of NASBLA

2016 ADMINISTRATIVE (pp. 4-6)

ERAC-2016-A1: Accident Report Terms and Definitions Guidance to the States

In follow-up to the approval by NASBLA members of standardized accident report terms and definitions (2012, 2013) and the committee's issuance in 2013 of basic implementation and use guidance, continue to facilitate the states' efforts to assimilate the standardized terms. Respond directly to questions from states or make appropriate referrals. Identify issues that may result from casualty reporting policy guidance or regulatory proposals issued by the U.S. Coast Guard in 2015-2016.

➢ All resources associated with the Accident Reporting Terms & Definitions Project and developed to date by ERAC for use by the states are available and maintained on a dedicated project webpage in the NASBLA Lighthouse Get Equipped portal.

➢ Resources related to this charge include ERAC's transition guidance document developed in coordination with U.S. Coast Guard staff and issued in 2013 upon acceptance by NASBLA membership of the remaining three of the five project lists; and, during the current cycle, a compilation of tables that map the existing and previously-used terms to new term selections that resulted from the project (see **APPENDIX: ERAC-2016-A1(a)**). Also added to the project page during the 2016 cycle, *Why aren't boaters paying attention?* a June **Small Craft Advisory** article (published online July 1), with content tied to the NASBLA 2015-2016 Top 10 Most Wanted items #3 address distracted boating/improper lookout and #5 standardized state/federal accident terminology (see **APPENDIX: ERAC-2016-A1(b)**).

➢ In this cycle, as of this report date, there have not been any new requests to ERAC for direct assistance from states that would like to transition to the project terms. While many states continue to express interest in adopting them, several have indicated they are holding on making comprehensive changes to their accident report forms pending resolution of various issues such as those described below and related federal regulatory and policy action effective or anticipated to be proposed in 2016-2017.

➢ Theoretically, states—especially the 14 that use a system other than BARD-Web for their direct input of accident report data or that maintain a separate database for in-state purposes—can use the terms in their accident reporting if they so choose. However, all states are still required to provide their data to the U.S. Coast Guard, which has not adopted corresponding term changes in BARD at the national level. And state requests to the Coast Guard for changes to their own BARD-Web entry screens were put on hold beginning November 2013 when the Coast Guard advised that it needed to reprioritize and redirect BARD development work in light of internal efforts toward updating its manual on casualty reporting (see activity described in **ERAC-2016-A2**).

➢ During this cycle, with progress in adoption of the terms still affected by these factors, ERAC initiated discussion on possible options for state use that would not be solely dependent on the timing of the terms' formal adoption at the national level. However, ERAC also acknowledged such facilitation must still be in the context of Coast Guard policy and regulatory actions anticipated in 2016-2017 (which ERAC will monitor and to which it will formally respond upon issuance).

➢ The NASBLA Executive Board approved ERAC's recommendation to continue this charge in 2017, with updated language and strategies (see **APPENDIX: ERAC-2017-Initial Charges**).

ERAC-2016-A2: Input to U.S. Coast Guard Policy and Regulatory Proposals and Actions

> Coordinate NASBLA's research on—and actively prompt the states to respond to—U.S. Coast Guard policy initiatives and regulatory proposals on accident reporting and other areas within ERAC's jurisdiction. Monitor the Federal Register, review relevant documentation, coordinate and develop information resources for NASBLA member states, and facilitate their discussion of and response to the proposals. Use the standard NASBLA channels and the specialized committee forums including The NASBLA Lighthouse "On the Horizon" and discussion forum portals.

➢ In this cycle (and the month preceding its onset), the following were developed: the resources and analysis used to inform NASBLA's response to the U.S. Coast Guard's Federal Register Notice on the draft Recreational Boating Accident Reporting Manual (COMDTINST); the NASBLA responses to the 60- and 30-day Coast Guard Federal Register Notices on its Boating Accident Report information collection request to the U.S. Office of Management & Budget; and the content of NASBLA Resolution 2016-1 supporting advancement of the Coast Guard's accident reporting regulatory project. NASBLA's Federal Register pages also were maintained. Select activities are detailed below.

➢ As described in the Final Committee Report for 2015, in the waning days of the committee cycle, the Coast Guard published a 90-day Federal Register Notice seeking comments on a draft Recreational Boating Accident Reporting Manual, COMDTINST M16782.1. The draft posted to Docket USCG-2015-0753 on Aug. 27. ERAC prepared *First Look: Information and Issues,* a discussion paper for use at NASBLA's annual conference in Wichita. In accord with directives resulting from the September conference discussion, ERAC followed up with two national teleconferences (Oct. 1 and 2, with 30+ persons participating and 20 states represented); revised *First Look* with additional information gathered from the states (see **APPENDIX: ERAC-2016-A2(a))**; and prepared the comments package that was delivered to the BLAs for an online vote conducted Oct. 14-Nov. 13. Fifty-three member states cast affirmative ballots by the deadline. NASBLA's comments were submitted Nov. 17, 2015.

➢ ERAC also developed content for NASBLA's response to a Coast Guard 30-day Federal Register Notice on a Boating Accident Report (BAR) Information Collection Request (ICR) to the Office of Management & Budget. [In accord with 2015 conference discussions on the manual draft and related issues, ERAC members onsite had drafted NASBLA's response to the 60-day BAR ICR Notice for approval as an action item during the Sept. 15 Business Meeting.] The second Notice, which included Coast Guard responses to submissions received from the first, was inaccurate in its representation of NASBLA's comments. A letter citing the inaccuracies was prepared for NASBLA Executive Board approval and submission Jan. 27, 2016, on behalf of NASBLA members. See **APPENDIX: ERAC-2016-A2(b).**

➢ In 2016, to encourage movement on the Coast Guard's accident reporting regulatory project that had been initiated in summer 2012, ERAC developed a draft resolution for initial consideration by the NASBLA Executive Board and then the BLAs during the spring Workshop in Lexington. In follow-up to BLA comments and board action, ERAC modified the draft and sponsored two national teleconferences (June 23 and 24) to inform and to seek edits before the board issued the final language for an online vote conducted June 27-July 27. By the deadline, 50 NASBLA member states cast affirmative ballots accepting Resolution 2016-1, (see **APPENDIX: ERAC-2016-A2(c)).**

➢ The NASBLA Executive Board approved ERAC's recommendation to continue this charge in anticipation of Coast Guard regulatory and policy actions in 2017 (see **APPENDIX: ERAC-2017-Initial Charges**).

ERAC-2016-B2: The NASBLA Lighthouse Forum

Continue to support and grow the content detail, components and protocols of The NASBLA Lighthouse, the committee's publicly-accessible, online resource and discussion forum currently housed on the NASBLA website and Connect platform. Identify best practices for driving users to the webpages and increasing active membership and participation in the discussion and library components. In the event of an organizational transition to a new AMS/web platform in 2016, ensure the migration of all existing Lighthouse components and files.

In follow-up to **ERAC-2015-A3 Electric Shock Drowning (ESD) Issues/Guidance**, integrate the committee's 2015 ESD products and key resource organizations' documents, tools, and links into the continuing development of the Lighthouse "Get Equipped" dedicated subpage and library portals.]

➢ In the 2016 cycle, the NASBLA Lighthouse continued its evolution as a subsection of the NASBLA website and a community on Connect (discussion forum and library). The website product consists of a launch page and seven portals, with 12 pages currently accessible to the public and two non-public pages for committee-specific resources.

➢ Webpage content continued to be maintained and updated on an as needed basis by committee staff, in consultation with the charge team, with the most frequent updates made to the On the Horizon and launch pages of the site.

➢ In May and June 2016, two additional subpages to the Get Equipped portal were populated with text and product uploads and went live: Electric shock drowning (ESD) resources, a component of a 2015 ERAC charge that was absorbed into the Lighthouse charge work for 2016; and a Human performance investigation in accidents subpage associated with human factors work conducted in **ERAC-2016-C2**. See **APPENDIX: ERAC-2016-B2.** As of this report date, the resource libraries associated with these two topics remain under construction in the Lighthouse Community on Connect.

➢ The NASBLA Executive Board approved ERAC's recommendation to continue this charge with updated language to reflect anticipated changes in NASBLA's technology platforms in 2017, and to incorporate future work on the Accident Report Terms & Definitions Reference and Resource Modules (ERAC-2016-B1) into the Lighthouse development (see **APPENDIX: ERAC-2017-Initial Charges**).

2016 ACCIDENT REPORTING & ANALYSIS (pp. 7-9)

ERAC-2016-B3: State-Level Statistical Report Template:

In coordination with the U.S. Coast Guard (as it works with the BARD contractor to build the product into the system), complete the development and implementation phases for this standardized template. Enlist two or three states beyond those represented on ERAC to test the product for use in compiling and reporting out their state-level accident and related statistics. Develop additional instructional materials as needed. Maintain all resources on the Lighthouse "Get Equipped" dedicated subpage.

➢ In development since mid-2014, the template is intended to give states the ability to more easily and accurately generate state-level statistical reports from the accident report data they enter into the U.S. Coast Guard's Boating Accident Report Database (BARD). The objective since initiation has been to build the report template into BARD-Web, allowing state users the ability to generate an editable Microsoft® Word document with narrative, summary statistics, and detailed tables.

➢ Most of the work of the charge team was accomplished during the 2015 committee cycle. In April 2015, a dedicated page for the template was created in the NASBLA Lighthouse Get Equipped portal (see **APPENDIX: ERAC-2016-B3).** And on July 29 of that year, a revised, working template was delivered to the U.S. Coast Guard to begin work with the BARD contractor on developing the report into the system.

➢ By the middle of the 2016 cycle, work had progressed at the Coast Guard with the BARD contractor. In March 2016, the team was able to conduct a beta review of state reports pulled from the system. State team member feedback on the template's utility and identified issues was carried to the contractor for resolution. By early August 2016, Coast Guard staff was testing the modifications and invited state members to conduct their own report pulls, assist in determining whether issues were being sufficiently resolved, and provide additional feedback as warranted. As of this report date, member states were continuing to test the product. Coast Guard staff remained confident that the template would be a functional product heading into the new committee cycle.

➢ The NASBLA Executive Board approved ERAC's recommendation to continue aspects of this charge into 2017, with updated language to reflect anticipated completion of product functionality, rollout, and follow-up activity, including development of instructional materials and possible product refinements (see **APPENDIX: ERAC-2017-Initial Charges**).

ERAC-2016-B4: Quality of Accident Report Narratives

Complete content development for a product (or set of instructional products) intended to improve the quality of accident report narratives. In consultation with NASBLA's Enforcement & Training Committee, identify the most effective method(s) for delivering this information on writing quality narratives to officers/investigators and state personnel involved in reviewing accident reports.

➤ This is one of two charges (see also **ERAC-2016-B5**) that emerged from the inaugural run of the ERAC triage in 2015 and was approved by the NASBLA Executive Board in February 2015 as a multi-year project with the initial focus on *content* development by ERAC and then development of appropriate *format and delivery* methods by NASBLA's Enforcement & Training Committee.

➤ In the 2016 cycle, the final guidance draft of *Good Practices: Writing Recreational Boating Accident Report Narratives* was completed, accompanying sample narratives were developed, and all content was put to review and final editing by the charge team in July through mid-August 2016 (see **APPENDIX: ERAC-2016-B4**).

➤ Given ERAC's completion of the project's content in this cycle, the NASBLA Executive Board approved a recommendation to drop this as an ERAC-centric charge for 2017. As of this report date, the product has been delivered to Enforcement & Training to identify additional delivery methods of the content for the target audiences. See **APPENDIX: ERAC-2017-Initial Charges**.

ERAC-2016-B5: Documenting Alcohol and Drug Involvement in Accidents

Complete content development for a product intended to lead to more uniformity in officers' and investigators' capture of alcohol or drug involvement in recreational boating accidents (i.e., the check-off for involvement, apart from the identification and capture of alcohol or drugs as causative/contributing factors). In consultation with NASBLA's Enforcement & Training Committee, identify the most appropriate formatting and delivery of the content to the law enforcement community.

➤ This is the second of two charges (see also **ERAC-2016-B4**) that emerged from the inaugural run of the ERAC triage in 2015 and was approved by the NASBLA Executive Board in February 2015 as a multi-year project with the initial focus on *content* development by ERAC and then development of appropriate *format and delivery* methods by NASBLA's Enforcement & Training Committee.

➤ During this cycle, the final draft of *Guidance: Documenting Alcohol or Drug Involvement as a Contributor in Recreational Boating Accidents* was completed, with content put to review and editing by the charge team in July and early August 2016 (see **APPENDIX: ERAC-2016-B5**).

➤ Given ERAC's completion of the project's content in this cycle, the NASBLA Executive Board approved a recommendation to drop this as an ERAC-centric charge for 2017. As of this report date, the product has been delivered to Enforcement & Training to identify additional delivery methods of the content for the target audiences. See **APPENDIX: ERAC-2017-Initial Charges**.

ERAC-2016-C2: Human Factors: Applying Best Practices for Gathering/Examining Data

Work with the three states identified in 2015 to pilot use of the human performance investigation guidance and tool included in the charge package developed by ERAC in 2014. Examine the data collected by the pilot states, release the analyses and lessons learned, and refine the existing guidance and tool as needed. Add to and maintain all related resources at the Lighthouse "Get Equipped" and library portals.

➢ In October 2014, after conducting two cycles of exploratory work in the area of human factors and gauging the applicability of a modified version of the Human Factors Analysis and Classification System (HFACS) to recreational boating accidents, ERAC released *Human Performance Investigation in Recreational Boating Accidents: Best Practices for Gathering and Examining Human Factors Data*. The package included guidance and a supplemental report form for states that wished to augment their investigations.

➢ The guidance and report form were used by the state of Tennessee to supplement its investigations of fatal accidents during its 2015 boating season. The outcomes and analysis of the state's experience were documented for evaluation by the charge team in the 2016 cycle.

➢ In May 2016, following suggestions for improvements gathered before, during and after the committee's February meeting in Lexington, the team updated the guidance document and supplemental form for use in 2016 by two other pilot states—Oregon and Florida (see complete package in **APPENDIX: ERAC-2016-C2**). These items, along with additional information about human factors and performance investigations, became part of a dedicated subpage in the Get Equipped portal of the Lighthouse.

➢ The NASBLA Executive Board approved ERAC's recommendation to continue this charge into 2017 for the purposes of examining the findings of the additional pilot states, refining the guidance and form as necessary, and building the library resources on this topic (see **APPENDIX: ERAC-2017-Initial Charges**).

2016 SPECIAL PROJECTS

ERAC-2016-B1: Terms and Definitions Reference and Resource Modules

Refine/update the content of the Accident Report Terms & Definitions Reference and Resource Modules (v2013.2) as needed or as may be required as a result of casualty reporting policy guidance or regulatory proposals issued by the U.S. Coast Guard in 2015-2016. Work with NASBLA management to identify additional platforms (beyond the current PowerPoint package) for distribution to users. Determine whether additional modules based on content associated with 2015-2016 charges on accident report narratives, documentation of alcohol/drug use, or other topics should be developed.

➢ The most current version of this charge product, *Navigating through Recreational Boating Accident Terms and Definitions: Reference and Resource Modules* v 2013.2, was released in October 2014, prior to the NASBLA annual conference that year. The product is contained in a PowerPoint package (250MB) available as a zip file in the NASBLA Lighthouse Library on Connect.

➢ During this cycle, more widespread release and more extensive content and format modifications were put on hold for reasons described in the discussion of **ERAC-2016-A1 Accident Report Terms and Definitions Guidance to the States**, and for pending format and delivery decisions that might be made in 2017 regarding the content from products associated with **B4 Quality of Accident Report Narratives** and **B5 Documenting Alcohol and Drug Involvement** (see p. 8 of this report).

➢ NASBLA's Executive Board approved ERAC's recommendation to omit this activity as a separate charge and instead integrate future work on the modules into the continuing development of the Lighthouse Forum. See **APPENDIX: ERAC-2017-Initial Charges**.

ERAC-2016-C1: National Recreational Boating Survey (NRBS) Priority Research

Continue assessing the data, findings, and other issues associated with the U.S. Coast Guard's National Recreational Boating Survey. Complete the examination of outstanding issues identified in ERAC's 2015 research brief "Recreational Boating Fatality Statistics: *an exploration of fatality rate calculations and comparisons*." Determine the feasibility (and implications) of recalculating the fatality rate numerator on the basis of the victim's state of origin rather than the accident location. Collaborate with the Coast Guard, as possible, on other research topics emerging from the survey. Serve the states' interests in providing input to future survey planning as opportunities arise.

➢ A variety of products have resulted from the committee's analysis of the 2012 survey, and are available through the dedicated subpage located in the Get Equipped portal of the Lighthouse.

➢ During the 2016 cycle, while products developed in previous years—such as the state data tables on exposure hours and boats estimates—were applied to other NASBLA projects, there was no substantial, additional work by ERAC on this charge. This was the result of multiple factors, including the mid-cycle change in ERAC leadership, departure of the primary survey statistician from the U.S. Coast Guard, and the fact that the data from the survey were rapidly becoming dated.

➢ Recognizing these factors, NASBLA's Executive Board approved ERAC's recommendation to split the charge in 2017—one for ERAC's role in providing input to the survey (per the MOU between the Coast Guard and NASBLA), and the other, for a separate research project on a larger issue regarding the numerator associated with fatality rates. See **APPENDIX: ERAC-2017-Initial Charges**.

2016 Engineering & Equipment Issues

Under the subcommittee structure established at the beginning of CY 2016, in the absence of board-assigned charges to it for the cycle, this group has served primarily as an enhanced monitoring body and a core base for determining the ERAC's next steps on engineering and equipment issues that emerged from the committee's 2015 triage, and that have been under discussion by key external organizations and subcommittees working in this broad area of interest.

➢ Following their breakout session at the Feb. 19, 2016, committee meeting in Lexington, the group members presented three issues in priority order of importance (see Meeting Summary). One of the issues of relatively "lesser" priority, regarding Visual Distress Signals, resulted in a quick turnaround deliverable, a **Small Craft Advisory** article, *Disposing of an old flare* (May 2016).

➢ However, on the two issues it identified as higher priority—use of engine cut-off switches (ECOS) and flotation issues, especially as they apply to canoes and kayaks—the group set out a series of "pre-charge" exploratory activities. Moving into the 2017 cycle, the continuing work in both topics will require, respectively, monitoring related charge work by NASBLA's Enforcement & Training Committee and consultation with NASBLA's Paddlesports Committee regarding any findings or next steps

➢ The NASBLA Executive Board approved a recommendation for a new charge in 2017, this one regarding the capture and recording of hull design characteristics and detail in accident investigations. See **APPENDIX: ERAC-2017-Initial Charges**.